## **Lawrence Livermore National Laboratory**

# Management and Operations

Effective management, efficient business practices and safe, secure, environmentally responsible operations provide the essential foundation for Lawrence Livermore National Laboratory's (LLNL) mission activities.

LLNL is committed to achieving simultaneous excellence in science and operations and to responsible stewardship of the public trust. LLNL aims for continuous improvement in safety, security and environmental stewardship. These considerations are explicitly designed into all Laboratory activities. Success in both science and operations depends on teamwork, and teamwork depends on people. The Laboratory strives to recruit, develop and sustain an outstanding, diverse workforce with the range of skills needed to meet its mission needs today and in the future.

The Director's Office Principal Directorate and the Operations and Business Principal Directorate are responsible for providing myriad functions that comprise the Laboratory's management and operational infrastructure.

#### Security

LLNL engages in a wide range of national security-related activities, including operations with nuclear materials and the

handling of sensitive information. An extensive physical and cyber security infrastructure is in place, and is continually tested and upgraded, to protect Laboratory personnel, information, property and nuclear material against current, evolving and anticipated threats. LLNL applies the principles of Integrated Safeguards and Security Management to explicitly incorporate security into the planning, management and execution of all Laboratory activities.

#### Environment, Safety and Health (ES&H)

Robust ES&H and sustainability programs ensure that the wide range of activities conducted at the Laboratory are performed in a manner that protects the health and safety of employees and the public, prevents property damage and preserves the environment. Under LLNL's integrated approach to safety and environmental management, facility and operational safety procedures are designed to reduce and manage risks, and environmental stewardship is integrated into the planning and execution of all Laboratory activities. A major sustainability initiative has led to significant reductions in greenhouse gas emissions, water consumption and energy usage even as major experimental campaigns ramp up and new supercomputers come on line.

#### **Business and Operations**

A full spectrum of support services keeps the Laboratory running efficiently and cost-effectively. Centralized management of facilities and infrastructure provides full life-cycle stewardship of



LLNL continues to optimize the environmental sustainability of its facilities and operations. Five Laboratory buildings, including the one-of-a-kind Terascale Simulation Facility (above) and a National Ignition Facility building that supports the world's largest laser, have earned green building certification. Efforts to certify other facilities are in progress.



### Management and Operations



LLNL's site, from design and construction, to maintenance and operation, to demolition and environmental restoration. Fiscal accountability is ensured through the use of integrated finance and budget services, including best-practice financial systems and performance-based budgeting, and streamlined business systems enhance efficiency and control costs.

#### Workforce

The scientific, technical and operational challenges of LLNL's mission require a workforce of exceptionally talented, skilled and dedicated employees. The Laboratory takes a strategic approach toward recruiting, developing and sustaining a diverse workforce with the critical skills required to meet national security needs. Its compensation, benefits, career development and employee services programs are market-competitive and are designed to recognize and reward employee performance.

#### Management

The Laboratory applies best-in-class management practices to enable it to meet its contractual obligations while facilitating mission execution and programmatic success. Implementation of work breakdown structures, the Earned Value Management System, and other project controls allows LLNL to effectively manage large, complex projects with transparency and accountability. An integrated Contractor Assurance System provides the information and insight necessary to enable the Laboratory to accurately track progress toward its contract

Robust systems are in place, including an integrated safety management system, continually enhanced security capabilities, an ISO-certified environmental management system, and best-practices financial and performance management systems, to ensure the Laboratory meets its commitment to excellence in operations as well as science.

deliverables and provide assurance to stakeholders and customers that the Laboratory is successfully meeting its performance requirements.

#### LLNL at a Glance

Location: Livermore, California

Mission: Multi-program national security science and technology

Type: Government-owned, contractor-operated, federally funded research and development center

Contract Operator: Lawrence Livermore National Security, LLC

Principal Sponsor: U.S. Department of Energy, National Nuclear Security Administration

Website: www.llnl.gov

#### **Physical Assets:**

- · Main site: 465 facilities on 820 acres
- · Site 300: 214 facilities on 7,000 acres
- 7.0 million gross square feet in active operational buildings
- · Replacement plant value: \$6.8 billion

#### **Human Capital:**

- 6,200 employees (including limited-term employees and postdoctoral fellows)
- 2,500 scientists and engineers (more than 40% of whom are Ph.D.s)
- 500 facility users, visiting scientists, teachers, and students

FY 2013 Costs: \$1.5 billion

For more information, contact the LLNL Public Affairs Office, P.O. Box 808, Mail Stop L-3, Livermore, California 94551 (925-422-4599) or visit our website at www.llnl.gov.

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